

REPUBLIC OF KENYA

MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND FORESTRY

KENYA METEOROLOGICAL DEPARTMENT

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REF.NO: KMD/FCST/4-2024/MARINE/16 Date: 22nd April, 2024

7-Day Marine Forecast for the KENYA coast and off shore areas along the Western Indian Ocean Region Validity: 23/04/2024 - 29/04/2024

1.0 GENERAL OUTLOOK

1.1 Wind Speed & Direction:

South Easterly winds are expected over Somalia, Kenya and Tanzania waters with wind speeds of 10-15 knots (7.5 m/s) from 23rd to 27th April thereafter 28th and 29th April wind speed will increase to 25 knots (12.5m/s).

1.2 Sig. Wave Height and Direction:

South-easterly waves expected over Somalia and Kenya waters with expected wave height of 1.2 to 2.1m (4-7ft) while; south easterly waves expected over Tanzania waters with wave heights of 1.5 - 2.7 m ($\approx 5 - 9 \text{ft}$) on 28^{th} and 29^{th} April.

1.3 Sea conditions

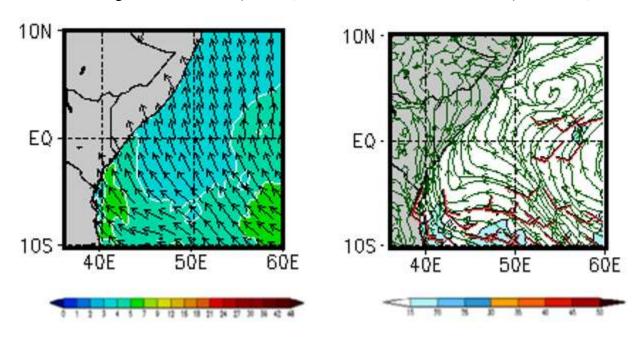
- Moderate sea condition with wave heights of 1.2-2.1m (4-7ft) expected over Somalia and Kenya waters while
- While moderate to strong sea conditions of wave height 1.5 -2.7m (5-9ft)
- Gentle to Fresh breeze with wind speeds of (10 to 25 Knots) expected over Somalia, Kenya and Tanzania waters throughout the forecast period.

2.0 WINDS AND SIGNIFICANT WAVE HEGHTS FORECAST FOR THE PERIOD 23rd April TO 29th April, 2024.

2.1 Tuesday 23rd April, 2024: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

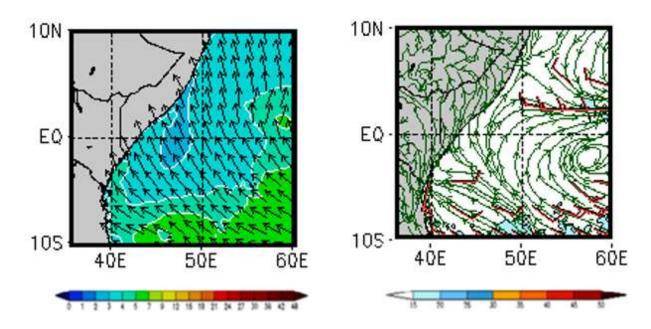
Wave height: 1.2 m to 2.1m ($\approx 4-7$ ft)

10m Winds: 10-15knots ($\approx 5-7.5 \text{ m/s}$)



2.2 Wednesday 24th April, 2024: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

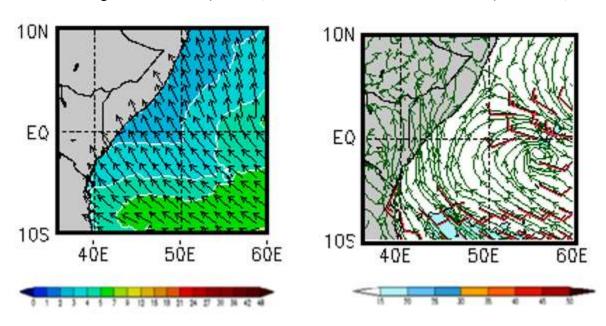
Wave height: 0.6 to 2.1 m ($\approx 2 - 7$ ft) 10m Winds: 10knots (≈ 5.0 m/s)



2.3 Thursday 25th April, 2024: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

Wave height: 0.6 to 2.1m ($\approx 2-7$ ft)

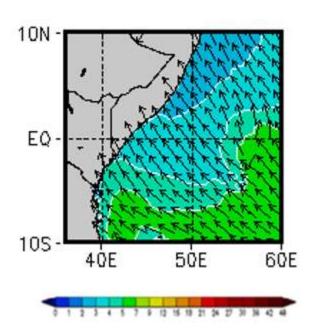
10m Winds: 10-20knots (≈ 5 -10 m/s)

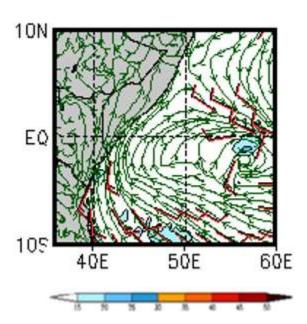


2.4 Friday 26th April, 2024: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

Wave height: 0.6 to 2.1 m ($\approx 2-7$ ft)

10m Winds: 10-20knots (≈ 5 -10 m/s)

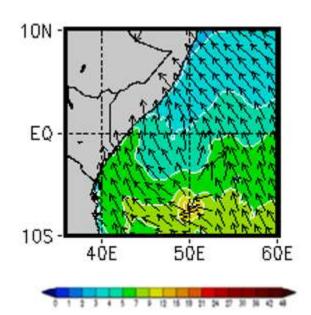


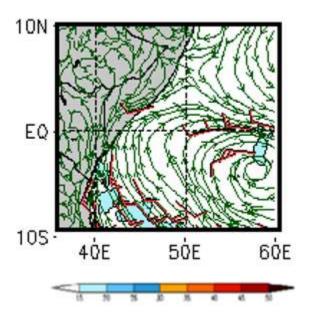


2.5 Saturday 27th April, 2024: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

Wave height: 0.9 to 2.1 m ($\approx 3 - 7$ ft)

10m Winds: 10 -20 knots (≈ 5 -10 m/s)

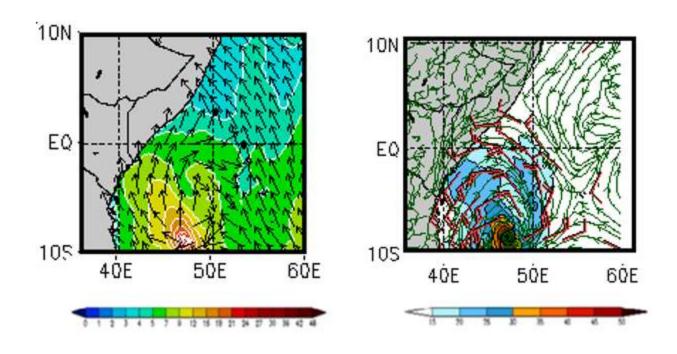




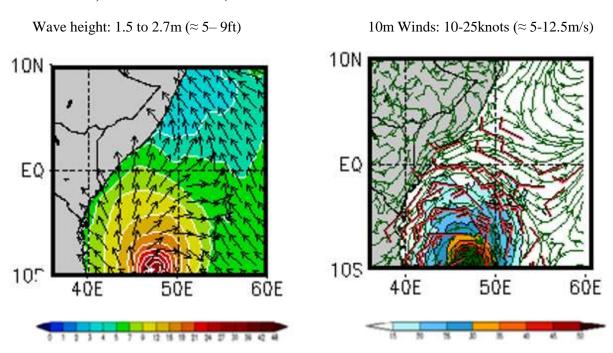
2.6 Sunday 28th April, 2024: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)

Wave height: 1.5 to 2.7m (≈ 5 –9ft)

10m Winds: 10-25 knots ($\approx 5 - 12.5 \text{m/s}$)



2.7 Monday 29th April, 2024: Significant Wave Height and wind speed (Wave scale in meters; Wind scale in m/s)



3.0 Tide forecast valid 23rd April, 2024 to 29th April, 2024

Date	Description	High Tide		Low Tide	
		Time	Height	Time	Height
Tue 23 rd April, 2024	1st Tide	04:06 AM	3.13 m	10:01 AM	0.50 m
	2 nd Tide	04:16 PM	3.51 m	10:28 PM	0.36 m
Wed 24 th April, 2024	1 st Tide	04:33 AM	3.17 m	10:25 AM	0.46 m
	2 nd Tide	04:41 PM	3.60 m	10:55 PM	0.30 m
Thur 25 th April, 2024	1 st Tide	05:00 AM	3.16 m	10:50 AM	0.46 m
	2 nd Tide	05:08 PM	3.63 m	11:23 PM	0.30m
Fri 26 th April, 2024	1 st Tide	05:29 AM	3.10 m	11:16 AM	0.51 m
	2 nd Tide	05:36 PM	3.60 m	11:53 PM	0.37 m
Sat 27th April, 2024	1st Tide	05:58 AM	2.98 m	11:43 AM	0.60 m
	2 nd Tide	06:06 PM	3.50 m		
Sun 28 th April, 2024	1 st Tide	06:30 AM	2.82 m	12:25 AM	0.50 m
	2 nd Tide	06:40 PM	3.35 m	12:12 PM	0.74 m
Mon 29 th April, 2024	1 st Tide	07:08 AM	2.62 m	01:02 AM	0.69 m
	2 nd Tide	07:20 PM	3.13 m	12:47 PM	0.92 m

KEY ON SEA STATE

WAVE HEIGHT RANGE (Meters)	DESCRIPTION	IMPACT
$0.6 - 1.0 \text{ m} \ (\approx 1.8 - 3.0 \text{ ft})$	Slight	Conditions suitable for Marine activities
$1.0 - 1.9 \text{ m}. (\approx 3.0 - 5.7 \text{ ft})$	Slight - Moderate	
$2.0 - 2.9 \text{ m} \ (\approx 6.0 - 8.7 \text{ ft})$	Moderate-Rough	Caution on operating marine activities
$3.0 - 4.0 \text{ m} \ (\approx 9.0 - 12.0 \text{ ft})$	Rough	Warning in place!!!!
$4.1 - 5.5 \text{ m} \ (\approx 12.3 - 16.5 \text{ ft})$	Very Rough	Warning in place and marine activities on
		hold

KEY ON SEA STATE

WIND	RANGE	DESCRIPTIONS	IMPACT
	< 1 – 7 Knots	Calm to Light breeze	1 – 6 knots, the Ocean is relatively calm with very little disturbance. Suitable for Marine operations
	7 – 21 Knots	Gentle breeze to Fresh breeze	7 – 17 knots, small boats are likely to be filled with water sprays and become unstable. Caution in carrying out marine activities
	22 - ≥34 Knots	Strong breeze to Extremely Strong breeze	More than 21 knots, the ocean state is very much disturbed and the prevailing conditions are dangerous for marine operations. Warning in place!!!!!

N.B: This forecast should be used in conjunction with the daily marine forecast issued by this Department.

In concurrence with outputs from relevant marine data platforms, acknowledgement is fully accorded to: ESSO- Indian National Centre for Ocean Information Services (INCOIS), mercator-ocean.fr, COPERNICUS Marine Environment Monitoring Service (CMEMS) and other related sources.

Dr. David Gikungu

DIRECTOR OF KENYA METEOROLOGICAL DEPARTMENT